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I hereby certify that this paper and every paper referred to therein as being enclosed is deposited with the U.S. Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on APRIL 4, 2002 (Date of Deposit)  
04-01-02

Name Shelly H. De

*Received*

PATENT



Attorney Docket No. 306 D12  
M&W Ref. No. APM/079-95-CP1-CN1-CPA-DV1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
COLLINS, ET AL. ) Group Art Unit: 1763  
)  
Entitled: PLASMA REACTOR HAVING RF ) Examiner: Unknown  
POWER APPLICATOR AND A DUAL- )  
PURPOSE WINDOW )  
)  
Serial No.: 10/021,195 )  
)  
Filing Date: October 30, 2001 )

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REQUEST FOR CORRECTION OF FILING RECEIPT

Assistant Commissioner for Patents  
OFFICE OF INITIAL PATENT EXAMINATION'S  
CUSTOMER SERVICE CENTER  
Washington, D.C. 20231

Dear Sir:

Applicants hereby request issuance of a new filing receipt to correct an error listed on the mailed from the USPTO on February 13, 2002. Please note the error highlighted on the enclosed copy of the Filing Receipt. In particular, the correction is listed as follows:

The Continuing Data as Claimed by Applicant is incomplete. The Continuing Data does not list the complete prior history data as listed in the specification as filed. Enclosed please find a copy of the first two pages of the specification, as filed, listing the complete prior history data.

Applicants respectfully request the Patent Office to correct the Filing Receipt and forward copy to Applicant.

If the Examiner should have any questions regarding the above correction, the Examiner is requested to telephone Applicant's representative at the number listed below.

Respectfully submitted,

  
Robert M. Wallace  
Reg. No. 29,119  
Attorney for Applicant(s)

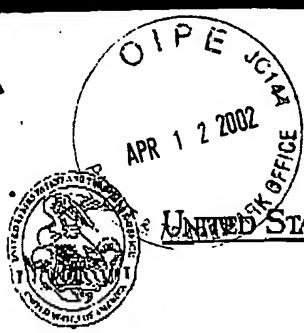
Dated: April 4, 2002

Please direct all telephone calls to:

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Please continue to send all correspondence to:

Patent Counsel  
Applied Materials, Inc.  
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Santa Clara, CA 95035



## UNITED STATES PATENT AND TRADEMARK OFFICE

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CORRECT PRIORITY  
NO CERCOMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/021,195	10/30/2001	1763	932	306 D12	26	26	4

COPY

CONFIRMATION NO. 1196

FILING RECEIPT



\*OC00000007468394\*

PATENT COUNSEL  
APPLIED MATERIALS, INC.  
Legal Department  
3050 Bowers Ave., M/S#2061  
Santa Clara, CA 95054

RECD FEB 20 2002

Date Mailed: 02/13/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

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Farahmand E. Askarinam, Sunnyvale, CA;  
Douglas A. Buchberger JR., Tracy, CA;  
Craig A. Roderick, San Jose, CA;

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## Assignment For Published Patent Application

Applied Materials, Inc.;

COMPUTER ENTERPRISE

FEB 20 2002

## Domestic Priority data as claimed by applicant

THIS APPLICATION IS A DIV OF 09/350,234 07/08/1999

Incomplete!!

## Foreign Applications

If Required, Foreign Filing License Granted 02/12/2002

Projected Publication Date: 05/23/2002

Non-Publication Request: No

Early Publication Request: No

**Title**

Plasma reactor having RF power applicator and a dual-purpose window

**Preliminary Class**

216

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Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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Attorney Docket No. 306 D12

PLASMA REACTOR HAVING RF POWER APPLICATOR AND A DUAL-PURPOSE  
5 WINDOW

Inventors: Kenneth S. Collins, Michael Rice, Farahmand E. Askarinam, Douglas A. Buchberger, Jr., Craig A. Roderick

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BACKGROUND OF THE INVENTION

Technical Field:

The invention is related to heating and cooling apparatus in an inductively coupled RF plasma reactors of 15 the type having a reactor chamber ceiling overlying a workpiece being processed and an inductive coil antenna adjacent the ceiling.

Related Applications:

20 This application is a divisional of U.S. Patent application Serial No. 09/350,234, filed July 9, 1999 entitled "Plasma Reactor Having A Dual Mode RF Power Application" (currently pending), which is a continuation of application Serial No. 08/733,555, filed October 1, 1996 25 (now issued as Patent No. 6,063,233), which is a continuation-in-part of application Serial No. 08/648,254, filed May 13, 1996 (now issued as Patent No. 6,165,311), which is a continuation-in-part of application Serial No. 08/580,026, filed December 20, 1995 (currently pending), 30 which is a continuation of application Serial No. 08/041,796, filed April 1, 1993 (now abandoned), which is a continuation of application Serial No. 07/722,340, filed June 27, 1991 (now abandoned), which is a continuation-in-part of application Serial No. 08/503,467, filed July 18, 35 1995 (now issued as Patent No. 5,770,099), which is a

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divisional of application Serial No. 08/138,060, filed October 15, 1993 (now issued as Patent No. 5,477,975), which is a continuation-in-part of application Serial No. 08/597,577, filed February 2, 1996 (now issued as Patent No. 5 6,077,384), which is a continuation-in-part of application Serial No. 08/521,668, filed August 31, 1995 (now abandoned), which is a continuation-in-part of application Serial No. 08/289,336, filed August 11, 1994 (now abandoned), which is a continuation of application Serial 10 No. 07/984,045, filed December 1, 1992 (now abandoned). In addition, U.S. application Serial No. 08/648,265 filed May 13, 1996 (now issued as Patent No. 6,165,311) discloses related subject matter.

15 Background Art:

In a plasma processing chamber, and especially in a high density plasma processing chamber, RF (radio frequency) power is used to generate and maintain a plasma within the processing chamber. As disclosed in detail in the above-referenced applications, it is often necessary to control temperatures of surfaces within the process chamber, independent of time varying heat loads imposed by processing conditions, or of other time varying boundary conditions. In some cases where the window/electrode is a semiconducting material, it may be necessary to control the temperature of the window/electrode within a temperature range to obtain the proper electrical properties of the window. Namely, for the window/electrode to function simultaneously as a window and as an electrode, the electrical resistivity is a 25 function of temperature for semiconductors, and the temperature of the window/electrode is best operated within 30 a range of temperatures. The application of RF power to